## Buildings Technology Research and Development Subcommittee Senior Principals Meeting

May 19<sup>th</sup>, 2011

Location: 950 L'Enfant Plaza DOE

Time: 1:30-2:30 p.m.

Senior Principals	Agency/Office	
Shyam Sunder	DOC/NIST	BTRD Co-chair
Roland Risser	DOE/EE-Buildings	BTRD Co-chair
Paul Domich	BTRD Ex-Sec	
Nick Sinai	EOP/OSTP	
William Grosshandler	DOC/NIST	
Kevin Kampschroer	GSA	
Diane Stewart	HHS	
Jeff Marqusee	DOD/SERDP/ESTCP	
Ilker Adiguzel	ERDC USACE	
Kendra Gastright	SI	
Anna Franz	AOC	
Mike Ritter	USDA	
Kevin Teichman	EPA	
Terry Schubert	USPS	
Mary Ellen Hynes	DHS	
Jeremiah Schofield	SSA	

Next Meeting: June 16, 2011 1:30 - 3:30 PM, 950 L'Enfant Plaza DOE

## Meeting Calendar:

June 16, 2011	October 13, 2011
July 21, 2011	November 17, 2011
August 18, 2011	December 15, 2011
September 15, 2011	

**Introductions:** Subcommittee Co-Chair Roland Risser (DOE) opened the monthly meeting of the Subcommittee for Buildings Technology Research and Development (BTRD) welcoming the agency representatives and thanking them for their participation. All participants provided self-introductions.

**BTRD Overview:** Risser began the meeting by providing a brief overview of the restructuring effort underway for the BTRD. The restructuring proposal requires commitment from the agencies to contribute to their development and to establish the timeline and deliverables for a list of candidate subcommittee topics. The topics represent high priority areas that require interagency

involvement, have a short timeframe for completion, and may cover the spectrum from RD&D to O&M. At the last meeting, participants discussed and ranked their priorities. The restructuring proposal requires commitment from the agencies to contribute to their development and to establish the timeline and deliverables for each topic. Risser then addressed each topic in order, soliciting agency commitments to participate and additional comments on the topic. The summary of the topics, agency commitments, and roles are summarized below. Additional discussion will follow this meeting with GSA and others not in attendance.

## **Additional Discussion Notes on Priority Topics**

**Submetering:** DOE is developing a technical specification for a low cost submeter (\$50). Interagency input is requested so that the resulting specification will meet the needs of all federal agencies. USACE indicated concerns that information assurance issues inhibit rollouts and integration of submetering systems. The security requirements for the submeter specification should be investigated and possibly included in the specification.

**Solid State Lighting:** Insufficient agency interest – topic is on hold.

**Behavioral Issues:** No new information available. GSA may have interest in joining with SI and HHS on this topic.

**Ongoing Commissioning:** NIST has a technical program focused on commissioning issues and impacts. FEMP may be a potential lead for this topic area.

**Federal Participation on ISO 50001:** The U.S. meeting on ISO 50001 is in two weeks. A list of focus areas for the new standard will be circulated to members. Other federal agencies may wish to participate in this standards development beyond or in place of DOE at the October meeting held in the U.S.. Current focus areas include: benchmarking, measurement and verification procedures, and workforce and training issues.

Whole Building Retrofits/Lighting Systems: USACE will provide a modified description that accurately depicts the requirements/needs for whole-campus retrofits. The focus will include sustainability issues and potentially other building/campus design and retrofit requirements – security, resiliency, IEQ, etc.

**Energy Information Systems:** A potential path forward could include a DOE survey of federal facility owners and operators. DOE will send a survey to the BTRD member contacts in order to obtain their agencies response. Survey topics could include: do you have an EIS or BAS? What type and vintage? How is it being used? What are the challenges and benefits you have with your EIS?

**Building Energy Models:** DOE is improving the usability of building energy models. NIST has expertise that may contribute to this work and NIST will provide the names of those individuals. The goals for the next release of models are to make the models more user friendly and speed-up the time required to produce good, useable results. Lightweight models will be put on hold.

**Performance-based Contracting:** DOE/FEMP may have interest in leading this effort. The goal is to stream-line the procurement process and to define the RFP so to encourage the awardees with meeting or exceeding minimum design requirements and provide rewards when significant progress above minimum requirements is achieved.

**Action Item:** Domich will distribute the list of ISO 50001 focus areas to the members.

**Action Item:** The lead and participating agencies will define the deliverables and expected timeline for their topic areas. Domich will coordinate these activities.

Action Item: DOE will confirm FEMP interest in leading several of these topics.

**Closure:** Sunder and Risser thanked the participants for the contributions and the meeting adjourned at 2:30pm.

Agency Participation L – Lead C – Co-lead P – Participate	OSTP	EPA	GSA	USACE	DOD	HHS	S	AOC	DOE	NIST	DHS	SSA	USPS
Submetering			?	Р					L	Р		Р	
<ul> <li>Performance Specification</li> </ul>													
Information Assurance													
Implementation Issues													
Solid State Lighting (SSL) – on hold			_			_	_						
Behavioral Issues	_		?			P	Р	_	_	_			
On-going Commissioning <sup>1</sup>	Р		?			Р	Р	С	L	Р			
ISO Stds for Building O&M			?	_					L				
Whole Building/Campus EE <sup>2</sup>			?	L					Р				
<ul> <li>Agency SSL rollouts</li> </ul>													
Energy Information Systems (EIS)	Р								L			Р	Р
<ul> <li>Integration Issues</li> </ul>													
Building Energy Models		?							L	Р			
<ul> <li>Verification/Validation Issues</li> </ul>													
<ul> <li>"Lightweight" Energy Models</li> </ul>													

<sup>&</sup>lt;sup>1</sup> DOE/FEMP Participation likely

<sup>2</sup> DOE/FEMP Participation possible

Performance-based Contracts <sup>3</sup> 2 2					
1   G     G	Performance-based Contracts <sup>3</sup>	?	?	L	

Topic Priorities by Agency	OSTP	GSA	USACE	DOD	HHS	S	AOC	DOE	NIST	DHS
Submetering	1	1	1	1	3	5	7	1	4	
<ul> <li>Performance Specification</li> </ul>				1						
<ul> <li>Information Assurance</li> </ul>			1							
<ul> <li>Implementation Issues</li> </ul>					3					
Solid State Lighting (SSL)		2				3	5	4		
Behavioral Issues	4	3		4	2	2	6	5		
On-going Commissioning	2	4	4	2	1		2	2	1	
ISO Stds for Building O&M		5	_				3			
Whole Building/Campus EE			2			4	4			
Agency SSL rollouts	•		•		_			•	•	
Energy Information Systems (EIS)	3		3		5		1	3	3	
Integration Issues			_	•			1		_	
Building Energy Models			5	3		1	8		2	
Verification/Validation Issues						1			2	
"Lightweight" Energy Models				3						_
Integrated Building Design Objectives					4					1
<ul> <li>Performance Contracts</li> </ul>					4					

<sup>&</sup>lt;sup>3</sup> DOE/FEMP Participation likely